

Part 3: Reconciling payment intents to bank account transactions

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It's important for Stripe to know whether a given payment intent has been settled to our bank account. Bank account transactions represent changes in Stripe's bank account balance.

Part 3 (a) [optional]

Please modify your program from part 2, as follows:

1. after submitting all the clearing files, get the bank account transactions from the server
2. print a reconciliation report to STDOUT that describes the state of your submitted payment intents

You'll need to come up with a way to tie the payment intent with the bank account transaction as it goes through the clearing process.

Note that not all submitted clearing files will have been settled! More files may need to be submitted to move things along - you can use your part II code for this.

You will notice that more than one clearing file may be grouped into the same bank account transaction. Clearing files are processed in order, and are never split over multiple bank account transactions. Here's an [example listing of bank account transactions](#) after the first few clearing files were submitted, and the [corresponding reconciliation report](#).

You can fetch a correct reconciliation report in the web UI for debugging.

Part 3 (b)

Update your program to do the whole thing automatically:

1. retrieve the bank account transactions after each clearing file is submitted,
2. generate a report listing all payment intents and their status, and
3. validate that report against the server's version.

When You're Finished

You're done! If you're really bored, there's an extension ([#4](#)) that you could look at - but don't feel any pressure to :)

Information about the clearing service (extended)

The service you previously submitted to has these other endpoints:

- `/get_bank_account_transactions` : GET from this endpoint to get a list of bank account transactions
- `/validate_reconciliation_report` : POST to this endpoint with a reconciliation report in the `reconciliation_report_contents` field. The response will indicate correct and incorrect reconciliation values. GET from this endpoint to get the server's reconciliation report - could be useful for debugging.

More documentation is available [here](#)

Hints

- The server is not deterministic between API keys. You can use the `/reset` endpoint to reset server state on an existing API key if you want to replay the same process, assuming your code is also deterministic.
- The overall process is that the clearing service will receive clearing files, and after some number of clearing files have been submitted (try 3-4) will settle the clearing file by adding a bank account transaction to the list of bank account transactions. Each clearing file corresponds to a list of payment intents, so if you can connect the clearing file to the settled bank account transaction, then you know that those payment intents have settled. If you can't, then those payment intents are still pending.
- The clearing service processes clearing files in order, and never splits a clearing file over multiple bank account transactions. Therefore, each bank account transaction maps to one or more clearing files, and those clearing files are consecutive.
- The amount of a bank account transaction is the sum of the amounts of the clearing files it is settling.
- The timestamp of a bank account transaction is after the timestamp of the clearing files it is settling.

